(No Model.)

M. B. CLAUNCH & A. SMITH.

WIRE STRETCHING AND REELING MACHINE.

No. 439,720. Patented Nov. 4, 1890.

Fig. 3.

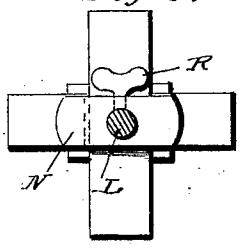


Fig. 1.

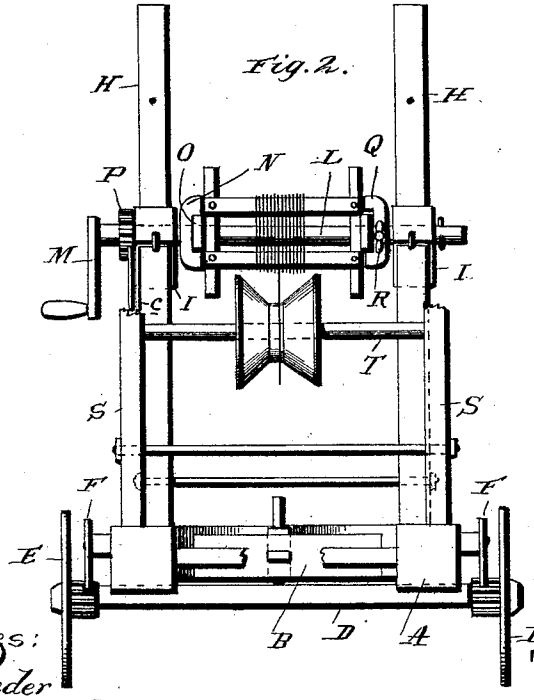


Fig. 2.

Fig. 4.

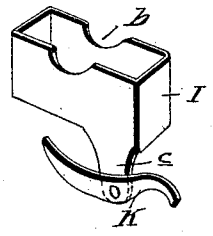
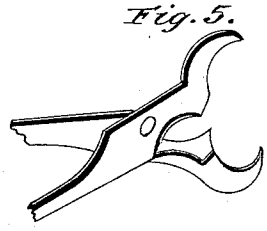


Fig. 5.



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UNITED STATES PATENT OFFICE.

MARTIN B. CLAUNCH AND ABRAHAM SMITH, OF MEXIA, TEXAS.

WIRE STRETCHING AND REELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 439,720, dated November 4, 1890.

Application filed July 11, 1890. Serial No. 358,424. (No model.)

To all whom it may concern:

Be it known that we, MARTIN B. CLAUNCH and ABRAHAM SMITH, citizens of the United States, residing at Mexia, in the county of Limestone and State of Texas, have invented certain new and useful Improvements in Wire Stretching and Reeling Machines; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in wire-stretchers for use in building wire fences, and also adapted to take up the wire and reel the same when it is desired to take a fence down.

The improvements will be fully understood from the following description and claims when taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of our improved machine in an operative position. Fig. 2 is a rear elevation of the same, showing several portions broken away better to illustrate the mechanism. Fig. 3 is an end elevation of the wire-reel and the shaft thereof, showing the clamping-casting and set-screw in position. Fig. 4 is a perspective view of one of the supporting-boxes which affords a bearing for the reel-shaft, and Fig. 5 is a perspective view of a compound implement employed in connection with the wire stretching and reeling machine.

In the construction of our improved machine any preferable material may be employed, and the form of the several elements may be varied to promote their operation, without departing from the spirit of our invention.

In carrying out the invention the body portion A, which may be of any length and width, is in the main of a rectangular shape and provided at its forward portion with a tapering end; but it is obvious that this body portion may be constructed in any form desired. The longitudinal side bars of the body portion are provided at points adjacent to their respective ends with transverse connecting-bars, and at the end of the tapering portion the bars are connected by a transverse bolt *a*, which also passes through a bar C, situated between the longitudinal bars, and which is connected at its inner end to the forward cross-bar B, and is provided at its outer end with a suitable clevis for the attachment of the draft. At a suitable point upon the bottom of the body portion between the rear end and the forward tapering portion we attach an axle D, which is supported by wheels E, which turn thereon. These wheels E, which are otherwise of the usual construction, have the inner portions of their hubs provided with cog-teeth, which lock the wheel when engaged by a gravitating pawl F, attached to the longitudinal bars of the body, and this gravitating pawl is so situated and constructed that it rides over the cogs of the hub when the machine is moving forward; but as soon as the wheels are drawn backward the pawl engages the teeth on the hub and locks the same. By this construction it will be seen that when the machine is in operation any tendency to pull it backward will be resisted by the gravitating pawls and an anchor bar or prong, presently to be described, which takes into the earth.

G indicates the anchor bar or prong, which is of an approximate horn shape and is shouldered at its upper end and has a reduced and threaded end which takes into a threaded aperture in the forward cross-bar B midway of the length thereof, and which is secured therein by means of a nut, although other means may be employed to attach it to the body. Now it will be seen that when the machine is in a proper position if the forward portion is depressed the anchor, the point of which is rearwardly disposed, will take into the ground and will act in conjunction with the gravitating pawls F to render the machine temporarily stationary and to resist any tendency to backward movement, and it will also appear that when it is desired to move the machine forward the anchor devices described will in no way interfere with such movement.

Rising from the longitudinal bars of the body portion at a suitable point and in line with each other are two standard branches H, which are inclined at a suitable angle away from the rear of the machine, and which are longitudinally slotted for a sufficient portion of their length for the reception of the shaft

of the winding-reel, which rests upon bearings afforded by adjustable boxings or castings I, which embrace the slotted standards and are supported by means of pins J, which take into transverse openings in the standards at different points in the height thereof.

The castings or boxings I, of which there are two employed, are preferably of a rectangular shape to coincide with the shape of the standards in cross-section, and they are provided in the top edges of their side walls with curved recesses or seats *b*, which are in line with each other, and which in use occupy a position in line with the longitudinal slots of the standards, whereby the shaft placed in said slots will bear in the recesses and turn on the castings.

Formed integral with and depending from the lower end of the side wall of each casting at the corner thereof is an ear *c*, which is provided at a low point with an annular opening to receive a journal-pin, on which is fixed a lever-pawl K, for a purpose presently to be described.

The reel-receiving shaft L is of a length slightly greater than the width of the body, and it is provided upon one end with a fixed crank-arm M, by which it is turned. This shaft L also has secured to or formed integral with it at a suitable point in its length a clamp N, which has its ends turned inwardly and is adapted to receive between them a diametrical bar O, attached to the head of the reel, which otherwise may be of any preferable construction.

P indicates a pinion, which is fixed upon the shaft L at a point adjacent to the end thereof carrying the crank-arm, and this pinion, when engaged by the pawl K, attached to the casting I, serves to lock the reel and prevent the same from revolving.

Q indicates a movable clamp, which in general form is similar to the fixed clamp N, and which is provided with a central aperture for the reception of the shaft L, upon which it is adapted to be adjustably fixed by means of a set-screw R, which is threaded to take into a threaded aperture in said clamp. By a construction of this character it will be observed that a reel of any length may be fixed upon the shaft.

Rising from the body A at a point in rear of the supporting-wheels are upright standards S, which are suitably braced and are adapted to receive between them a transverse bar T, upon which is loosely journaled a shive-pulley over which the wire is drawn, and which plays laterly on the bar T as the wire is unwound or wound upon the reel.

V indicates two upright standards rising from the body in rear of the standards carrying the guide-sheave, and these rear standards V are provided with journal-apertures to receive the shafts of extra spools of wire.

In Fig. 5 of the drawings we have illustrated a combined tool, which embodies a wire cutter and nipper, and which we have found to be a valuable adjunct to the wire-stretching machine.

The operation of the several parts having been separately described, it is believed that a general description of their operation is unnecessary.

Having described our invention, what we claim is—

1. The improved wire stretching and reeling machine described, comprising the main frame, the forwardly-inclined slotted standards rising from the side bars thereof, the shaft-boxes receiving said standards, pins for adjustably securing the boxes to the standards, the pivoted pawls carried by said boxes, the reel-shaft carrying a pinion and bearing in the boxes, the rear supporting-wheels, the pinion on the shaft thereof, the pawl to engage said pinion, and the anchor G in the forward portion of the main frame, substantially as specified.

2. The combination, with the main frame, of the inclined and slotted standards secured thereto, the boxes arranged on said standards, the pivoted pawl carried by the boxes, and a reel-shaft carrying a pinion and arranged in the slots of the standards and supported by the boxes, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

MARTIN B. CLAUNCH.
ABRAHAM SMITH.

Witnesses:
W. E. DOYLE,
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